

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number		10599194
	Filing Date		2008-08-20
	First Named Inventor	Michael A. Caligiuri	
	Art Unit	1636	
	Examiner Name	KETTER, JAMES S	
Attorney Docket Number		22727/04450	

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1	Second Exam report for European patent application No. 05732514 4-2401 - Dated January 13, 2010 - Received January 18, 2010 (3 pages).	<input type="checkbox"/>
2	Third Exam report for European patent application No. 05732514.4-2403 - Dated March 8, 2011 - Received March 14, 2011 (4 pages).	<input type="checkbox"/>
3	CHIOREAN, et al. "BCR/ABL alters the function of NK cells and the acquisition of killer immunoglobulinlike receptors (KIRs)", Blood, (1 May 2003), Vol. 101, No. 9, pp. 3527-3533.	<input type="checkbox"/>
4	FEHNIGER, et al. "Ontogeny and expansion of human natural killer cells: clinical implications", Int. Rev. Immunol., (2001), Vol. 20, No. 3-4, pp. 503-536.	<input type="checkbox"/>
5	FEHNIGER, et al. "Interleukin-2 and interleukin-15: immunotherapy for cancer", Cytokine Growth Factor Rev., (April 2002), Vol. 13, No. 2, pp. 169-183.	<input type="checkbox"/>
6	GALANDRINI, et al. "The adaptor protein shc is involved in the negative regulation of NK cell-mediated cytotoxicity", Eur. J. Immunol., (July 2001), Vol. 31, No. 7, pp. 2016-2025.	<input type="checkbox"/>
7	INTRONA, et al. "Rapid retroviral infection of human haemopoietic cells of different lineages: efficient transfer in fresh T cells", Br. J. Haematol., (November 1998), Vol. 103, No. 2, pp. 449-461.	<input type="checkbox"/>
8	JIANG, et al. "Pivotal role of phosphoinositide-3 kinase in regulation of cytotoxicity in natural killer cells", Nature Immunology, (November 2000) Vol. 1, No. 5, pp. 419-425.	<input type="checkbox"/>
9	KIKUCHI-MAKI, et al. "KIR2DL4 is an IL-2-regulated NK cell receptor that exhibits limited expression in humans but triggers strong IFN-gamma production", The Journal of Immunology, (1 October 2003), Vol. 171, No. 7, pp. 3415-3425.	<input type="checkbox"/>
10	KINOSHITA, et al. "The T cell activation factor NF-Atc positively regulates HIV-1 replication and gene expression of T cells", Immunity, (March 1997), Vol. 6, pp. 235-244.	<input type="checkbox"/>
11	KINSELLA, et al. "Episomal vectors rapidly and stably produce high-titer recombinant retrovirus", Human Gene Therapy, (1 August 1996), Vol. 7, pp. 1405-1413.	<input type="checkbox"/>

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12	LIEBERMAN, et al. "Regulatory pathways involved in the infection-induced production of IFN-gamma by NK cells", <i>Microbes and Infection</i> , (December 2002) Vol. 4, No. 15, pp. 1531-1538.	<input type="checkbox"/>
13	MAASHO, et al. "Efficient gene transfer into the human natural killer cell line, NKL, using the Amaxa nucleofection system", <i>J. Immunol. Methods</i> , (January 2004), Vol. 284, No. 1-2, pp. 133-140.	<input type="checkbox"/>
14	PALU, et al. "Progress with retroviral gene vectors", <i>Rev. Med. Virol.</i> , (May-June 2000), Vol. 10, No. 3, pp. 185-202.	<input type="checkbox"/>
15	RUGGERI, et al. "Effectiveness of donor natural killer cell alloreactivity in mismatched hematopoietic transplants", <i>Science</i> , (15 March 2002), Vol. 295, pp. 2097-2100.	<input type="checkbox"/>
16	SCHROERS, et al. "Gene transfer into human T lymphocytes and natural killer cells by Ad5/F35 chimeric adenoviral vectors", <i>Exp. Hematol.</i> , (June 2004), Vol. 32, No. 6, pp. 536-546.	<input type="checkbox"/>
17	SHANKARAN, et al. "IFN-gamma and lymphocytes prevent primary tumor development and shape tumor immunogenicity", <i>Nature</i> , (26 April 2001), Vol. 410, pp. 1107-1111.	<input type="checkbox"/>
18	TROMPETER, et al. "Rapid and highly efficient gene transfer into natural killer cells by nucleofection", <i>Journal of Immunological Methods</i> , (1 March 2003), Vol. 274, pp. 245-256.	<input type="checkbox"/>
19	TROTTA, et al. "Differential Expression of SHIP1 in CD56(bright) and CD56(dim) NK cells provides a molecular basis for distinct functional responses to monokine costimulation", <i>Blood</i> (1st ed. Paper), prepublished online December 16, 2004, pp. 1-34.	<input type="checkbox"/>
20	UNUTMAZ, et al. "Cytokine signals are sufficient for HIV-1 infection of resting human T lymphocytes", <i>Journal of Experimental Medicine</i> , (7 June 1999), Vol. 189, No. 11, pp. 1735-1746.	<input type="checkbox"/>
21	WINDEBANK, et al. "Signal transduction during human natural killer cell activation. inositol phosphate generation and regulation by cyclic AMP", <i>The Journal of Immunology</i> , (1 December 1988), Vol. 141, No. 11, pp. 3951-3957.	<input type="checkbox"/>
22	YUSA, et al. "SHP-1- and phosphotyrosine-independent inhibitory signaling by a killer cell Ig-like receptor cytoplasmic domain in human NK cells", <i>The Journal of Immunology</i> , (15 May 2002), Vol. 168, pp. 5047-5057.	<input type="checkbox"/>

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23	SHARIFI, et al. "NK Cells as New Target for Gene Therapy; Using Retroviral Vectors as Promising Delivery System", Blood, (16 November 2002), Vol. 100, No. 11, Abstract No. 2559; 44TH Annual Meeting of the American Society of Hematology; Philadelphia, PA, USA; ISSN: 0006-4971 (abstract only).	<input type="checkbox"/>
24	LEVY, et al. Virology, (1994), 3d ed., pp. 129-133 and pp. 189-191	<input type="checkbox"/>
25	International Search Report for PCT/US05/009238, issued 2005-08-09 (1 page).	<input type="checkbox"/>

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Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

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- ☐ See attached certification statement.
- ☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- ☒ A certification statement is not submitted herewith.

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A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/j andrew mason/	Date (YYYY-MM-DD)	2011-11-15
Name/Print	J Andrew Mason	Registration Number	58544

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